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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------|-------------|----------------------|---------------------|------------------|
| 10/573,587 | 03/27/2006 | Hiroaki Sanji | Q93875 | 9454 |
| 23373 | 7590 | 08/18/2008 | EXAMINER | |
| SUGHRUE MION, PLLC | | | BOES, TERENCE | |
| 2100 PENNSYLVANIA AVENUE, N.W. | | | | |
| SUITE 800 | | | ART UNIT | PAPER NUMBER |
| WASHINGTON, DC 20037 | | | 3682 | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/573,587 | SANJI ET AL. | |
| | Examiner | Art Unit | |
| | TERENCE BOES | 3682 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 24 July 2008.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 3,7 and 8 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 3,7 and 8 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 03/27/2006 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ . | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:
 - Paragraphs 1, 11, 12, 14, 41, and 56 recite “tile pivot” which appears to be a typographical error of --tilt pivot--.

Appropriate correction is required.

Drawings

2. Figures 11-15 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the connecting member (as in claims 7 and 8) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate

prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claim 8 is objected to because of the following informalities:
 - Claim 8 recites "tile pivot" in line 4, which appears to be a typographical error of --tilt pivot--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 3, 7 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "tightly" in claim 3, line 6, is a relative term which renders the claim indefinite. The term "tightly" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

The term "loosely" in claim 3 line 20 respectively, is a relative term which renders the claim indefinite. The term "loosely" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim 8 recites the limitation "the connecting member" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

6. Claims 3 and 7, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Igarashi et al. GB 2343157.

Igarashi et al. disclose:

- an upper bracket (7) fixed to a vehicle body;
- a steering column (1) disposed between a pair of tightening plate portions (53) of the upper bracket;
- a steering shaft (45) provided rotatably within the steering column;

- a tilt mechanism comprising a tilt clamp (23, 53, 61) which tightly fastens the steering column between the tightening plate portions of the upper bracket and a tilt pivot (Pivot is about axis which is shown @ 5) which oscillates the steering column;
- an electric assist unit (19) disposed at a lower end of the steering column to transmit an assist force of an electric motor to an output shaft;
- a lower bracket (9) fixed to the vehicle body at an opposite side of the electric assist unit to the steering column to rotatably support a pivot shaft (5) of the tilt pivot,
- wherein a housing of the electric assist unit is brought into engagement with the pivot shaft of the tilt pivot in such a manner as to be allowed to move loosely, so that the steering column is allowed to oscillate about the pivot shaft, (the structure shown in figure 1 is capable of this function, additionally, the examiner notes while features of an apparatus may be recited either structurally or functionally, claims directed to >an< apparatus must be distinguished from the prior art in terms of structure rather than function. The reference discloses all claimed structural limitations and therefore anticipates the claim. See MPEP 2114).
- a column rotation restricting portion (see frictional surface of 5 which is capable of restricting rotation) is provided between the lower bracket and the housing.

- wherein the housing of the electric assist unit is brought into engagement with the pivot shaft of the tilt pivot via a connecting member (see back plate portion bolted to 19).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Igarashi et al. GB 2343157 in view of Minamoto et al. US 5048364.

Igarashi et al. discloses a tiltable steering column. Igarashi et al. does not disclose a pair of primary stopper projections which is formed below the pivot shaft of the tile pivot on the lower bracket in such a manner as to oppositely face the connecting member with a determined gap held between the connecting member and themselves; and a secondary stopper projection which is formed above the pivot shaft of the tilt pivot in such a manner as to oppositely face the connection member with a determined gap held between the secondary stopper projection and itself.

Minamoto et al. teaches a pair of primary stopper projections (46 and lower instance of 50) which is formed below the pivot shaft (6) of the tilt pivot on a lower bracket in such a manner as to oppositely face the connecting member with a determined gap held between the connecting member and themselves; and a secondary stopper projection (upper instance of 50) which is formed above the pivot

shaft of the tilt pivot in such a manner as to oppositely face the connection member with a determined gap held between the secondary stopper projection and itself. Because both Igarashi et al. and Minamoto et al. teach tilt steering columns, it would have been obvious to one having ordinary skill in the art at the time of the invention to provide a pair of primary stopper projections which is formed below the pivot shaft of the tile pivot on the lower bracket in such a manner as to oppositely face the connecting member with a determined gap held between the connecting member and themselves; and a secondary stopper projection which is formed above the pivot shaft of the tilt pivot in such a manner as to oppositely face the connection member with a determined gap held between the secondary stopper projection and itself to achieve the predictable result of limiting the travel of a steering column.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TERENCE BOES whose telephone number is (571)272-4898. The examiner can normally be reached on Monday - Friday 9:00 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. B./
Examiner, Art Unit 3682
8/6/08

/Richard WL Ridley/
Supervisory Patent Examiner, Art Unit 3682